

fasciculi. This arrangement is readily distinguished, if several fasciculi be drawn slightly from each other upon a plate of glass, and the intervening areolar tissue be viewed beneath the microscope. When the filaments reach the rounded extremities of the fasciculi, they become straight, and in this manner conjoin with the tendinous filaments originating at the extremities of the muscular fibres. The importance of this arrangement can be readily understood: from the diagonally crossing course of the areolar filaments, comparatively inelastic in themselves, the sheath is rendered elastic, thus permitting the muscular fibres freely to move without their action being interfered with; while at the point of attachment of the fasciculi, where any elasticity would be worse than useless, from the fact that part of the muscular action would be lost in the mere extension of an elastic substance, we find the filaments arrange themselves so as to become part of the inextensible tendon.—*Proceedings of the Academy of Natural Sciences of Philadelphia*, vol. iv. p. 119.

METEOROLOGICAL OBSERVATIONS FOR JUNE 1849.

Chiswick.—June 1, 2. Fine. 3. Fine: hazy: clear. 4. Very fine. 5. Sultry: showery at night. 6. Uniformly overcast. 7. Fine. 8. Fine: overcast. 9. Fine: rather cold: overcast: clear. 10—12. Overcast. 13. Fine: cloudy: clear. 14. Fine: slightly clouded. 15. Dusky haze. 16. Overcast: fine. 17. Fine: dusky haze. 18. Fine. 19. Slight rain. 20. Very fine. 21. Fine. 22, 23. Very fine. 24. Cloudless and very fine. 25. Overcast: very fine. 26—28. Very fine. 29. Cloudy: rain. 30. Cloudy: clear and cold at night.

Mean temperature of the month 59°·30

Mean temperature of June 1848 59·58

Mean temperature of June for the last twenty-three years ... 60·85

Average amount of rain in June 1·88 inch.

Boston.—June 1. Cloudy. 2—4. Fine. 5. Cloudy: rain, with thunder and lightning A.M.: rain P.M. 6—9. Fine. 10. Cloudy: rain early A.M. 11. Cloudy. 12. Cloudy: rain P.M. 13, 14. Fine. 15. Fine: rain P.M. 16. Cloudy. 17, 18. Fine. 19. Fine: rain A.M. and P.M. 20. Fine. 21. Cloudy. 22. Fine. 23. Cloudy. 24. Fine. 25. Rain. 26. Fine. 27. Cloudy. 28. Fine. 29. Fine: rain P.M. 30. Cloudy.

Applegarth Manse, Dumfries-shire.—June 1. Clear and bracing weather: shower A.M. 2. Fine and growing: one shower P.M. 3, 4. Fair and fine. 5. Fair A.M.: one shower P.M.: electr. 6, 7. Fair and fine. 8. Fair, but chilly from N.E. 9. Fair: air highly electric: thunder. 10. Fair and very droughty. 11. Fair and droughty: getting cloudy. 12. Fair and droughty: cleared away. 13. Fair and droughty. 14. Fair and droughty, but getting cloudy. 15. Fair and droughty: cloudy: thunder. 16. Slight shower: much thunder. 17. Again droughty. 18. Cloudy: a few drops of rain. 19. Heavy rain, night: shower, day. 20. Frosty during night: shower P.M. 21. A few drops: very high wind. 22. Rain at intervals. 23. Fair and clear. 24. Light rain: very mild. 25. Cloudy A.M.: slightly showery. 26. Slight shower P.M. 27. Fine: warm: fair all day. 28. Fair. 29. Rain P.M., not heavy but soft. 30. Fair all day and warm.

Mean temperature of the month 53°·3

Mean temperature of June 1848 55·7

Mean temperature of June for twenty-five years 56·1

Rain in June for twenty years 3·16 inches.

Sandwick Manse, Orkney.—June 1, 2. Bright: clear. 3. Bright: cloudy. 4. Showers: cloudy. 5, 6. Bright: clear. 7. Hazy: clear. 8. Bright: clear. 9. Bright: snow-showers. 10. Cloudy. 11. Bright: clear. 12. Bright: cloudy. 13, 14. Bright: clear. 15. Cloudy. 16. Drizzle: rain. 17. Clear: rain. 18. Rain. 19. Cloudy: damp. 20. Cloudy: rain. 21. Rain: clear. 22. Cloudy. 23. Rain: cloudy. 24. Bright: clear. 25. Bright: rain. 26. Fog: drizzle. 27. Showers: hazy. 28, 29. Bright: clear. 30. Bright: rain.